



ENTERED

1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/464,528C

DATE: 02/03/2003 P.6

TIME: 09:10:16

Input Set : A:\BB1205 US NA Corrected Seq Lst..txt

Output Set: N:\CRF4\02032003\I464528C.raw

3 <110> APPLICANT: Li, Zhongsen
4 Falco, S. Carl
6 <120> TITLE OF INVENTION: S-ADENOSYL-L-METHIONINE SYNTHETASE PROMOTER AND
7 ITS USE IN EXPRESSION OF TRANSGENIC GENES IN PLANTS
9 <130> FILE REFERENCE: BB1205 US NA
11 <140> CURRENT APPLICATION NUMBER: US/09/464,528C
C--> 12 <141> CURRENT FILING DATE: 2003-01-27
14 <160> NUMBER OF SEQ ID NOS: 20
16 <170> SOFTWARE: Microsoft Office 97
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 1518
20 <212> TYPE: DNA
21 <213> ORGANISM: Glycine max
23 <400> SEQUENCE: 1
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25 ttaaagtatt aagatggcag agacattcct atttacctca gagtcaagtga acgagggaca 120
26 ccctgacaag ctctgcgacc aaatctccga tgctgtcctc gacgcttgcc ttgaacagga 180
27 cccagacagc aaggttgccct gcgaaacatg caccaagacc aacttgggtca tgggtcttcgg 240
28 agagatcacc accaaggcca acgttgacta cgagaagatc gtgcgtgaca cctgcaggaa 300
29 catcggcttc gtctcaaagc atgtgggact tgatgctgac aactgcaagg tccttgtaaa 360
30 cattgagcag cagagccctg atattgccca ggggtgtgcac ggccacctta ccaaaagacc 420
31 cgaggaaatc ggtgctggag accagggtca catgtttggc tatgccacgg acgaaacccc 480
32 agaattgatg ccattgatgc atgttcttgc aactaaactc ggtgctcgtc tcaccgaggt 540
33 tcgcaagaac ggaacctgcc catggttgag gcctgatggg aaaacccaag tgactgttga 600
34 gtattacaat gacaacggtg ccattggttc agttcgtgtc cacactgtgc ttatctccac 660
35 ccaacatgat gagactgtga ccaacgacga aattgcagct gacctcaagg agcatgtgat 720
36 caagccggtg atcccggaga agtaccttga tgagaagacc attttccact tgaaccctc 780
37 tggccgtttt gtcattggag gtcctcacgg tgatgctggt ctcaccggcc gcaagatcat 840
38 catcgatact tacggaggat ggggtgctca tgggtggtgt gctttctccg ggaaggatcc 900
39 caccaagggt gataggagtg gtgcttacat tgtgagacag gctgctaaga gcattgtggc 960
40 aagtggacta gccagaaggt gcattgtgca agtgtcttat gccattggtg tgcccagacc 1020
41 tttgtctgtc tttgttgaca cctatggcac cgggaagatc catgataagg agattctcaa 1080
42 cattgtgaag gagaactttg atttcaggcc cggatgatc tccatcaacc ttgatctcaa 1140
43 gaggggtggg aataacaggt tcttgaagac tgctgcatat ggacacttcg gcagagagga 1200
44 ccctgacttc acatgggaag tggtaagcc cctcaagtgg gagaaggcct aaggccattc 1260
45 attccactgc aatgtgctgg gagtttttta gcgttgccct tataatgtct attatccata 1320
46 actttccacg tcccttgctc tgtgtttttc tctcgtcgtc ctccctctat tttgtttctc 1380
47 ctgcctttca tttgtaattt tttacatgat caactaaaaa atgtactctc tgttttccga 1440
48 ccattgtgtc tcttaatatc agtatcaaaa agaattgttc aagttaaaaa aaaaaaaaaa 1500
49 aaaaaaaaaa aaaaaaaaaa 1518
51 <210> SEQ ID NO: 2
52 <211> LENGTH: 2336
53 <212> TYPE: DNA

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54 <213> ORGANISM: Glycine max

56 <400> SEQUENCE: 2

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57 atcgatagag acatgttatt cacaaacccat aaaatgatgg ctaaaattgg tgtgattgga 60
58 acgatatctg tttattatga ttccagggcg caaaaatgcg agtacttaat aaaattttac 120
59 atttaaatta gaattttttt tatcaataaa tattaattta ttagttttat tagaaatatt 180
60 aattagaaaa ttttgaatcc ccgattttctc ctctttttct tcgctattca tcatttttcta 240
61 accaaaccaa tcttatatgt tcttcaaatt agaacttgaa attattaatt ataattaaac 300
62 tgaaaacaat ttgggtatcaa ttcatataca tgcttagtaa taaaatgcga taattaattg 360
63 ataattctgc aaaagatttt acaaatatct ttcagaaaaa attaataaca aattttgtcg 420
64 ttttcattgg gttgggtctga ggaggatttg gcactataga actctcctac ggaccattct 480
65 ttgcacttca actaaacgat ggtcagaatt ggtggggatt ttatattcaa gcatatccct 540
66 ttcaaaaactt cctacttact tcgtgcgttc ggtaatcggt aacattagac tttcaaaatc 600
67 atttttaacc cctaaacagt aaatttgaag gacaaaaata atatttttca aatttgatag 660
68 actatttttt ttttgtaatt tgacgaacca aaaccagatt tatcctgaat tttaggaacc 720
69 acagatgtaa ctaaaccaat atttattttat tttctaaaac aaaatttcat ggcagcatgc 780
70 ctccagcccat gaaaaaaacc ttataaaaaat atctacacat tgaccattga aaagttcgtt 840
71 ctcccatggg taaccagatc aaactcacat ccaaacataa catggatatc tccttaccaa 900
72 tcatactaata tattttgggt taaatattaa tcattatttt taagatatta attaagaaat 960
73 taaaagattt tttaaaaaaa tgtataaaat tatattattc atgatttttc atacatttga 1020
74 ttttgataat aaatatattt tttttaattt cttaaaaaat gttgcaagac acttattaga 1080
75 catagtcttg ttctgtttac aaaagcattc atcatttaat acattaaaaa atattttaata 1140
76 ctaacagtag aatcttcttg tgagtgggtg gggagtaggc aacctggcat tgaaacgaga 1200
77 gaaagagagt cagaaccaga agacaaataa aaagtatgca acaaacaat caaaatcaaa 1260
78 gggcaaaggc tgggggtggc tcaattgggt gctacattca attttcaact cagtcaacgg 1320
79 ttgagattca ctctgacttc cccaatctaa gccgcggatg caaacgggtg aatctaacc 1380
80 acaatccaat ctctgttact aggggctttt ccgtcattaa ctacccctg ccaccggtt 1440
81 tccctataaa ttggaactca atgctccctt ctaaaactcg atcgcttcag agttgagacc 1500
82 aagacacact cggtcatata tctctctgct cttctcttct cttctacctc tcaagggtact 1560
83 tttcttctcc ctctacaaa tcctagattc cgtggttcaa tttcggtact tgcacttctg 1620
84 gtttgctttg cttgtctttt tcctcaactg ggtccatcta ggatccatgt gaaactctac 1680
85 tctttcttta atatctgcgg aatacgcgtt ggactttcag atctagtcca aatcatttca 1740
86 taattgcctt tctttctttt agcttatgag aaataaaaatc attttttttt atttcaaaat 1800
87 aaaccttggg cttgtgtctg actgagatgg ggtttggtga ttacagaatt ttagcgaatt 1860
88 ttgtaattgt acttgtttgt ctgtagtttt gttttgtttt cttgtttctc atacattcct 1920
89 taggcttcaa ttttatccga gtataggtca caataggaat tcaaactttg agcaggggaa 1980
90 ttaatccctt ctttcaaact cagtttggtt gtatatatgt ttaaaaaatg aaacttttgc 2040
91 tttaaattct attataactt tttttatggc aaaaattttt gcatgtgtct ttgctctcct 2100
92 gttgtaaatt tactgtttag gtactaactc taggcttgtt gtgcagtttt tgaagtataa 2160
93 agatggcaga gacattccta ttcacctcgg agtcagtga cgagggacac cctgataagc 2220
94 tctgcgacca aatctccgat gctgtcctcg acgcttgct cgaacaggac ccagacagca 2280
95 aggttgcttg cgaaacatgc accaagacca acttggtcat ggtcttcgga gagatc 2336

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97 <210> SEQ ID NO: 3

98 <211> LENGTH: 522

99 <212> TYPE: DNA

100 <213> ORGANISM: Glycine max

102 <220> FEATURE:

103 <221> NAME/KEY: unsure

104 <222> LOCATION: (405)

105 <223> OTHER INFORMATION: n = a, c, g or t

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107 <220> FEATURE:
108 <221> NAME/KEY: unsure
109 <222> LOCATION: (509)
110 <223> OTHER INFORMATION: n = a, c, g or t
112 <220> FEATURE:
113 <221> NAME/KEY: unsure
114 <222> LOCATION: (515)
115 <223> OTHER INFORMATION: n = a, c, g or t
117 <400> SEQUENCE: 3
118 gaccaagaca cactcgttca tatactcttc tgctcttctc ttctcttcta cctctcaagt 60
119 ttttgaagta taaagatggc agagacattc ctattcacct cggagtcagt gaacgaggga 120
120 caccctgata agctctgcga ccaaattctcc gatgctgtcc tcgacgcttg cctcgaacag 180
121 gaccagaca gcaaggttgc ctgcgaaaca tgcaccaaga ccaacttggc catggtcttc 240
122 ggagagatca ccaccaaggc caacgttgac tacgagaaga tcgtgcgtga cacctgcagg 300
123 agcatcggtc tcatctcaaa cgatgtggga cttgatgtcg acaactgcaa ggtccttgta 360
W--> 124 aacattgagc agcagagccc tgatattgcc cagggcgtgc acggncacct taccaaaaga 420
125 cctgaagaaa ttggcgtctg tgaccaaggt cacatgtttg gctatgccac tgatgaaacc 480
W--> 126 ccaaaattca tgccattgag tcatgttcnt gcaancaagc tc 522
128 <210> SEQ ID NO: 4
129 <211> LENGTH: 30
130 <212> TYPE: DNA
131 <213> ORGANISM: Artificial Sequence
133 <220> FEATURE:
134 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
136 <400> SEQUENCE: 4
137 catgccatgg ttatacttca aaaactgcac 30
139 <210> SEQ ID NO: 5
140 <211> LENGTH: 24
141 <212> TYPE: DNA
142 <213> ORGANISM: Artificial Sequence
144 <220> FEATURE:
145 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
147 <400> SEQUENCE: 5
148 gctctagatc aaactcacat ccaa 24
150 <210> SEQ ID NO: 6
151 <211> LENGTH: 1314
152 <212> TYPE: DNA
153 <213> ORGANISM: Glycine max
155 <400> SEQUENCE: 6
156 tctagatcaa actcacatcc aaacataaca tggatatctc cttaccaatc atactaatta 60
157 ttttgggtta aataattaatc attattttta agatattaat taagaaatta aaagattttt 120
158 taaaaaaatg tataaaatta tattattcat gatttttcat acatttgatt ttgataataa 180
159 atatatTTTT ttttaatttct taaaaaatgt tgcaagacac ttattagaca tagtcttgtt 240
160 ctgttttaca aagcattcat catttaatac attaaaaaat atttaatact aacagtagaa 300
161 tcttcttgtg agtgggtgtg gagtaggcaa cctggcattg aaacgagaga aagagagtca 360
162 gaaccagaag acaataaaaa agtatgcaac aaacaaatca aaatcaaagg gcaaaggctg 420
163 gggttggctc aattgggtgc tacattcaat tttcaactca gtcaacggtt gagattcact 480
164 ctgacttccc caatctaagc cgcggatgca aacggttgaa tctaaccac aatccaatct 540
165 cgttacttag gggcttttcc gtcattaact caccctgcc acccggttc cctataaatt 600

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166 ggaactcaat gctcccctct aaactcgtat cgcttcagag ttgagaccaa gacacactcg 660
167 ttcatatatc tctctgctct tctcttctct tctacctctc aaggctacttt tcttctccct 720
168 ctaccaaata ctagattccg tgggtcaatt tcggatcttg cacttctggt ttgctttgcc 780
169 ttgctttttc ctcaactggg tccatctagg atccatgtga aactctactc tttctttaat 840
170 atctgcggaa tacgcgttgg actttcagat ctagtgcgaa tcatttcata attgcctttc 900
171 tttcttttag cttatgagaa ataaaatcat ttttttttat ttcaaaataa accttgggcc 960
172 ttgtgctgac tgagatgggg tttgggtgatt acagaatttt agcgaatttt gtaattgtac 1020
173 ttgtttgtct gtagttttgt tttgttttct tgtttctcat acattcctta ggcttcaatt 1080
174 ttattcgagt ataggtcaca ataggaattc aaactttgag caggggaatt aatcccttcc 1140
175 ttcaaatacca gtttgtttgt atatatgttt aaaaaatgaa acttttgctt taaattctat 1200
176 tataactttt tttatggcaa aaatttttgc atgtgtcttt gctctcctgt tgtaaattta 1260
177 ctgttttaggt actaactcta ggcttggtgt gcagtttttg aagtataacc atgg 1314
179 <210> SEQ ID NO: 7
180 <211> LENGTH: 22
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
187 <400> SEQUENCE: 7
188 ttcgagtata ggtcacaata gg 22
190 <210> SEQ ID NO: 8
191 <211> LENGTH: 19
192 <212> TYPE: DNA
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
198 <400> SEQUENCE: 8
199 cttcgctgag gacatggac 19
201 <210> SEQ ID NO: 9
202 <211> LENGTH: 21
203 <212> TYPE: DNA
204 <213> ORGANISM: Artificial Sequence
206 <220> FEATURE:
207 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
209 <400> SEQUENCE: 9
210 gagttgtcgc tgttgttcga c 21
212 <210> SEQ ID NO: 10
213 <211> LENGTH: 20
214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
220 <400> SEQUENCE: 10
221 aacacagcat ccgcattgcg 20
223 <210> SEQ ID NO: 11
224 <211> LENGTH: 21
225 <212> TYPE: DNA
226 <213> ORGANISM: Artificial Sequence
228 <220> FEATURE:

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229 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
 231 <400> SEQUENCE: 11
 232 aggagtgcag aatcagatca g 21
 234 <210> SEQ ID NO: 12
 235 <211> LENGTH: 20
 236 <212> TYPE: DNA
 237 <213> ORGANISM: Artificial Sequence
 239 <220> FEATURE:
 240 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
 242 <400> SEQUENCE: 12
 243 gctgatcgaa ccagatggag 20
 245 <210> SEQ ID NO: 13
 246 <211> LENGTH: 23
 247 <212> TYPE: DNA
 248 <213> ORGANISM: Artificial Sequence
 250 <220> FEATURE:
 251 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
 253 <400> SEQUENCE: 13
 254 ctgtacagtt aaacagtagt tct 23
 256 <210> SEQ ID NO: 14
 257 <211> LENGTH: 2165
 258 <212> TYPE: DNA
 259 <213> ORGANISM: Glycine max
 261 <400> SEQUENCE: 14
 262 atcgatagag acatgttatt cacaaacat aaaatgatgg ctaaaattgg tgtgattgga 60
 263 acgatatctg tttattatga ttccaggcg caaaaatgag agtacttaat aaaattttac 120
 264 atttaaatta gaattttttt tatcaataaa tattaattta ttagttttat tagaaatatt 180
 265 aattagaaaa ttttgaatcc ccgattttct ctccttttct tcgctattca tcattttcta 240
 266 accaaaccaa tcttatatgt tcttcaaatt agaacttgaa attattaatt ataattaaac 300
 267 tgaaaacaat ttggtatcaa ttcatataca tgcttagtaa taaaatgcga taattaattg 360
 268 ataaatctgc aaaagatttt acaaatatct ttcagaaaaa attaataaca aattttgtcg 420
 269 ttttcatggt gttggtctga ggaggatttg gcactataga actctcctac ggaccattct 480
 270 ttgcacttca actaaacgat ggtcagaatt ggtggggatt ttatattcaa gcatatccct 540
 271 ttcaaaaactt cctacttact tcgtgcgttc ggtaatcggg aacattagac tttcaaaatc 600
 272 attttttaacc cctaaacagt aaatttgaag gacaaaaata atatttttca aatttgatag 660
 273 actatttttt ttttgtaatt tgacgaacca aaaccagatt tatcctgaat ttttaggaacc 720
 274 acagatgtaa ctaaaaccaat atttatttat tttctaaaaa aaaatttcat ggcagcatgc 780
 275 ctcccatggg gaaaaaaacc ttataaaaat atctacacat tgaccattga aaagttcgtt 840
 276 ctcccatggg taaccagatc aaactcacat ccaaacataa catggatata tccttaccac 900
 277 tcatactaata tattttgggt taaatattaa tcattatttt taagatatta attaagaat 960
 278 taaaagattt ttttaaaaaa tgtataaaat tatatttttc atgatttttc ataattttga 1020
 279 ttttgataat aaatatattt tttttaattt cttaaaaaat gttgcaagac acttattaga 1080
 280 catagtcttg ttctgtttac aaaagcattc atcatttaat acattaaaaa atattttaata 1140
 281 ctaacagtag aatcttcttg tgagtgggtg gggagtaggc aacctggcat tgaaacgaga 1200
 282 gaaagagagt cagaaccaga agacaaataa aaagtatgca acaaacaat caaatcaaa 1260
 283 gggcaaaggc tggggttggc tcaattgggt gctacattca attttcaact cagtcaacgg 1320
 284 ttgagattca ctctgacttc cccaatctaa gccgcggatg caaacggttg aatctaacc 1380
 285 acaatccaat ctcgttactt aggggctttt ccgtcattaa ctacccctg ccaccgggtt 1440
 286 tccctataaa ttggaactca atgctcccct ctaaactcgt atcgcttcag agttgagacc 1500

RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 405,509,515
Seq#:17; N Pos. 3367
Seq#:18; N Pos. 3249
Seq#:19; N Pos. 2948
Seq#:20; N Pos. 3227

VERIFICATION SUMMARY

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Input Set : A:\BB1205 US NA Corrected\Seq Lst..txt

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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:360

L:126 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:480

L:423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:3360

L:553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:3240

L:630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:2940

L:711 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:3180